

ABSTRACT

1 This invention cures many inefficiencies with known scan
2 conversion methods. This invention employs a edge array
3 rather than a set linked list from an array of pointers equal
4 in number to the number of scan lines. This invention thus
5 eliminates storage of linked list pointers which in the prior
6 art included many null pointers resulting in better memory
7 utilization. es on-chip memory when employing a single chip
8 microprocessor. This invention sorts the active edge table
9 only at edge intersections and vertices, thus eliminating much
10 unneeded sorting. This invention permits integrated clipping
11 of a subject polygon by a clip polygon and forming trapezoids
12 filling the clipped area by activating trapezoid formation at
13 every vertex of either polygon and at every edge intersection.
14 This process saves code space and computer processing time.
15 This invention efficiently utilizes the resources of a
16 multiprocessor integrated circuit by spawning of subtasks from
17 a RISC type processor to one or more DSP type processors.